

A CLINICIAN DRAWS ON EVOLUTIONARY THEORY TO SHED LIGHT ON PTSD

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A Review of the Book

Evolution and Posttraumatic Stress: Disorders of Vigilance and Defence

By Chris Cantor. 2005.

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Once in a while I may stumble across a book, and I ask myself, “How did I miss this? Why weren’t my colleagues talking about this book when it came out?” That is the experience I had when, recently, I saw Chris Cantor’s slim volume from 2005, called *Evolution and Posttraumatic Stress: Disorders of Vigilance and Defence*. In it, Cantor grapples with controversies that remain controversies ten years after he wrote his book.

For example, he discusses the question of whether or not “complex PTSD” is a diagnostic category in its own right, and he deplores the ambiguous language and classifications around complex PTSD that made their way into both the DSM-IV-R (2000) and the ICD-10 (1992). These encyclopedias have been the major diagnostic guides for clinicians on both sides of the Atlantic and, indeed, around the world. Amazingly, the same controversy has remained in the latest revision of the DSM-5 (2013) and the same controversy is anticipated when the ICD-11 comes out in 2018. There is still widespread dissatisfaction over lack of clarity regarding diagnostic guidelines for PTSD, and the way the disorder is conceptualized. All of this suggests that Cantor’s book might be worth another look.

Introducing a general framework, Cantor suggests that PTSD symptoms may be part of a spectrum, along with other anxiety reactions: “The uncertainty as to whether PTSD exists on a continuum with ‘normal’ reactions is a particularly relevant issue with respect to evolutionary considerations” (p.32). He asks whether PTSD may be distinct, though, from other anxiety disorders, because of fairly permanent changes in endocrine functioning seen in some patients. This debate also continues within the field, as researchers study the role of epigenetic changes leading to, among other things, permanent dysregulation of cortisol functioning in patients with PTSD (Zovkic, et al., 2013). Cantor introduces, again, the relevance of evolutionary thinking as researchers tackle these questions.

Evolution and Posttraumatic Stress: Disorders of Vigilance and Defence has two main parts, the first being an ample review of theories about PTSD, and the second a very creative exploration of PTSD from an evolutionary and functional point of view. The first part of the book briefly reviews theories involving learning (including learned helplessness), controllability and predictability; all of these the author finds helpful in terms of explaining proximal mechanisms but less promising with regard to more distal mechanisms such as commonalities with other species, and function – Tinbergen’s concepts of phylogenetic and ultimate causation. Moving on, Cantor then provides more of an in-depth review of MacLean’s work on the triune brain and Panksepp’s on emotional circuitry in the brain.

These works by MacLean and Panksepp create the background for the second part of Cantor’s book, which is focused on the evolution of human defensive behaviors, and how that evolutionary process might have resulted in disorders of vigilance and defence, including PTSD. This second section is the most innovative part of the book. Drawing from Marks (1987), Cantor describes evolved mammalian defensive mechanisms, including what he terms six key defences: avoidance, attentive immobility, tonic immobility, withdrawal, aggressive defence, and appeasement. He describes how these six defences would have been selected for early on in human evolution, as males and females were vulnerable to human and non-human predators. His elaborations are quite thought-provoking. For example, several other writers have suggested continuities between tonic immobility (as seen in “playing possum”) and the dissociation that sometimes accompanies trauma. Cantor, however, differentiates between two types of immobility which may be essential for defence: attentive immobility, which makes us stop and use all of our senses to identify a threat, and tonic immobility, which goes further in the face of an overwhelmingly dangerous threat. Thus dissociation, which is commonly understood as pathological, Cantor suggests may be a defensive option taken to the extreme, and part of a functional adaptation to dangerous environments. An example he gives is that of the abused child: “Abused children often use dissociation extensively, in part to cope with the trauma and in part to preserve the illusion of good parents” (pp. 28-29). Cantor provides many fascinating examples from his own clinical practice, and he suggests practical research projects in pursuit of the links between evolved defensive mechanisms and PTSD.

Last but not least, consider the Dedication and Acknowledgments at the front of the book. Cantor, who is a well-known psychiatrist in Queensland, Australia, thanks several

readers of early drafts, including longtime ISHE activists John Price and Russell Gardner. On page xv, where Cantor thanks the people who have most influenced his thinking, his last paragraph reads, “Finally, my undying gratitude goes to my original mentor in evolutionary studies, Linda Mealey, whose work and encouragement served as an early inspiration to me. Linda tragically died of cancer, before I had completed the first draft of this book. I hope that her enthusiasm was not wasted on me.”

I have a strong, strong feeling that Linda Mealey would have loved this book. If you have any interest in an evolutionary approach to medicine, psychology, or psychiatry, you will, too.

ABOUT THE AUTHOR

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